Claims

1. A voice transmission apparatus arranged between a subscriber-side exchange to which a subscriber-side terminal

5   apparatus is connected and a network, characterized in that said voice transmission apparatus comprises:

a first interface means for exchanging a signal with said subscriber-side exchange;

a second interface means for exchanging a signal with said

10   network;

a voice signal processing means for detecting sound portions of a voice signal which constitutes said signal, for encoding the voice signal having sound portions, and for decoding an encoded voice signal inputted thereto;

15   a packet processing means for assembling packets from the voice signal encoded by said voice signal processing means, and for disassembling packets inputted thereto into a signal and for supplying it to said voice signal processing means;

a measurement means for measuring an amount of packets

20   which are discarded from packets associated with a voice signal included in the received packets, and an amount of jitter of the packets associated with the voice signal;

a calling restriction determination means for determining whether to impose a calling restriction based on

25   measurement results obtained by said measurement means; and

a control signal creating means for creating a control signal for imposing a calling restriction on said subscriber-side exchange when said calling restriction determination means determines that the calling restriction

30   needs to be imposed on said subscriber-side exchange.

2. The voice transmission apparatus according to Claim 1, characterized in that the packets include an IP packet, a UDP packet, and an RTP packet.

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3. The voice transmission apparatus according to Claim 1, characterized in that said second interface means is an interface means which complies with Ethernet.

10   4. The voice transmission apparatus according to Claim 1, characterized in that said control signal output means is an ITU-T Q.50 DLC processing means for outputting the control signal for imposing a calling restriction on said subscriber-side exchange according to ITU-T recommendation

15   Q.50.